

## ABSTRACT OF THE DISCLOSURE

5           An apparatus and method for making a composite tensile diaphragm having a  
nanopore. The apparatus provides a tensile layer in contact with a compressive layer. A  
small region of the tensile layer is removed to expose a small portion of the compressive  
layer. The compressive region of the tensile layer is small enough to avoid the buckling  
or wrinkling of the material. The apparatus has a length to thickness ratio from 10 to 60.  
10   Also disclosed is a method of making the apparatus.

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